



WI
TECH

CONFIGURATION REPORT

Vehicle VIN [REDACTED] JEEP WRANGLER(PHEV) 2.0L I4 DOHC DI TURBO PHEV ENGINE

Odometer [REDACTED]
Publication Date [REDACTED]

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	CURRENT VIN	ORIGINAL VIN	PART #
TCM	Transmission Control Module	CAN-C	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PCM	Powertrain Control Module	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ICS	Integrated Center Stack	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
RFH	Radio Frequency Hub	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ESM	Electronic Shifter	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
DTCM	Drive Train Control Module	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ORC	Occupant Restraint	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
EPS	Electric Power Steering	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
HVAC	Heat, Ventilation and A/C	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CSWM	Comfort Seat Wheel Module	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
AMP	Amplifier	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
IPC	Instrument Panel Cluster	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCCM	Steering Column Control Module	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
BCM	Body Controller	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
RADIO	Radio	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
OCM	Occupant Classification	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
BPCM	Battery Pack Control Module	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
HCP	Hybrid Control Processor	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
AHCP	Auxiliary Hybrid Control Processor	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

ABSO	Anti Lock Brakes	CAN-C	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] Module	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
DPDM	Driver Presence Detection Module	CAN-C	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
IDCM	Integrated Dual Charge Module	CAN-C	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

ECU SUMMARY INFO (CONT...)

ECU	COUNTRY CODE	HARDWARE VERSION	SOFTWARE VERSION	IDENT	SERIAL NUMBER	CVNS
TCM	[REDACTED]	[REDACTED]				[REDACTED]
PCM	[REDACTED]					[REDACTED]
ICS	[REDACTED]					[REDACTED]
RFH	[REDACTED] / [REDACTED]					[REDACTED]
ESM	[REDACTED]					[REDACTED]
DTCM	[REDACTED]					[REDACTED]
ORC	[REDACTED]					[REDACTED]
EPS	[REDACTED]					[REDACTED]
HVAC	[REDACTED]					[REDACTED]
CSWM	[REDACTED]					[REDACTED]
AMP	[REDACTED]					[REDACTED]
IPC	[REDACTED]					[REDACTED]
SCCM	[REDACTED]					[REDACTED]
BCM	[REDACTED]					[REDACTED]
RADIO	[REDACTED]					[REDACTED]
OCM	[REDACTED]					[REDACTED]
BPCM	Rest of world / ROW					[REDACTED]
HCP	[REDACTED]					[REDACTED]
AHCP	[REDACTED]					[REDACTED]
ABSO	[REDACTED]					[REDACTED]
SGW	[REDACTED]					[REDACTED]
DPDM	[REDACTED]					[REDACTED]
IDCM	[REDACTED]					[REDACTED]

CONFIGURATION

TCM CONFIGURATION

NAME	VALUE	UNITS
Autostick/ERS On/Off Switch Equipped	[REDACTED]	[REDACTED]
Paddle-Shift Switches Equipped		[REDACTED]
Shifter with Sport Mode Position Equipped		[REDACTED]
Shifter with Low Mode Position Equipped		[REDACTED]

Sport Mode Switch or Virtual Switch (Non-Terrain) Equipped

Overdrive Off or Tow Haul Mode Switch or Virtual Switch (Non-Terrain) Equipped

ECO/Optimizer Switch Equipped

ERS/Autostick/Tip Non-paddle on Steering Wheel equipped

ERS/Autostick/Tip Non-paddle on Shifter in D position equipped

ERS/Autostick/Tip Non-paddle on Shifter in A or M position equipped

FFV Equipped

RWD Equipped

AWD Equipped

4WD with switchable Lo Range equipped

Engine Start/Stop Equipped

Polystable E-shift (Cableless without return-to-center) equipped

Long Learn Enabled

Short Learn Enabled

PCM CONFIGURATION

NAME	VALUE	UNITS
AC Equipped		
AC Equipped Over Bus		
Power Steering Switch Equipped		
Integrated Cruise Control		
EMAT (Getrag DCT transmission) Equipped		
Vehicle Speed Sensor #1 Calculated from CAN		
Police Package Equipped		
Unleaded Gasoline Fuel		
Unleaded diesel fuel		
V8 Engine		
4 Speed Automatic Transmission Equipped		
Electronic Automatic Transmission (EATX) Equipped		
Vehicle Speed Sensor #1 Calculated by ECU		
V8 Engine		
V8 Engine		
V8 Engine		
Sensorless FFV Enabled		
Electronic Throttle Control Equipped		
Engine		
4.0 Liter I6 Engine		
Engine		
Engine		
V6 Engine		
Engine		
V6 Engine		

2.7 Liter V6 Engine

█ Solenoid Equipped

█ Equipped

Turbocharger Equipped

SRV Equipped

Secondary Air Equipped

SMI Indicator Lamp Equipped

Barometric Sensor Equipped

TIP Equipped

Battery Temp Sensor Equipped

Knock Sensor 1 Equipped

Knock Sensor 2 Equipped

W14 Variable Valve Timing Equipped

Clutch Interlock Switch Equipped

ESIM Equipped

Linear Purge Equipped

Linear EGR Equipped

Continuous Variable Transmission Equipped

Direct Injection Equipped

Secondary Fuel Pump Equipped

Electronic Coolant Pump Equipped

O2 Sensor Bank 1 Sensor 1 Equipped

O2 Sensor Bank 1 Sensor 2 Equipped

█ Sensor Bank 1 Sensor 3 Equipped

O2 Sensor Bank 2 Sensor 1 Equipped

█ Sensor Bank 2 Sensor 2 Equipped

Variable Displacement AC Equipped

Fixed displacement AC Equipped

W14 Intake Flow Control Valve Equipped

Electric Coolant Valve Equipped

Engine Oil Heater Cooler Equipped

Transmission Oil Heater Equipped

Electric Water Pump Equipped

Rear Heater Equipped

Starter Relay 2 Equipped

Inrush Current Reduction Relay Equipped

Active Grille Shutter Equipped

Electronic Vacuum Pump Equipped

Wide Range O2 Sensor █ Equipped

Wide Range O2 Sensor █ Equipped

MultiAir Equipped

Engine Stop Start Equipped

Viscosity Sensor Equipped
 Duty Cycle Purge Valve Equipped
 Electric Thermostat Heater Equipped
 Exhaust Cam 1 Equipped
 Intake Cam 1 Equipped

WI4 engine
 WI4 engine
 WI4 engine
 engine

Tumble Generator Valve Equipped
 Hybrid Electric Vehicle Equipped
 Auxiliary Heater Electric Water Pump Equipped
 Dual Speed Fuel Pump Equipped
 Exhaust Cam 2 Equipped
 Intake Cam 2 Equipped

1 Speed Fan Mechanical Relay System Equipped
 2 Speed Fan Mechanical Relay System Equipped
 2 Speed Fan PWM Relay System Equipped
 Linear PWM Fan Relay System Equipped
 PWM Fan Motor System Equipped
 3 Speed Fan Mechanical Relay System Equipped
 Fan Wake Up Relay System Equipped
 2 Speed Fan 3 3 Relay System Equipped

/ /
 / /
 /

VLP Is Learnable Indicator
 VLP Equipped Indicator
 VFS Actuators Available Indicator
 ERS Equipped Indicator
 Engine Software In Package
 Transmission Software Included
 ICC Cruise Equipped
 ETC Cruise equipped
 Adaptive Cruise Control Equipped
 A/C Equipped
 Adaptive Cruise Control Hardware Equipped
 DUAL_ALTERNATOR_GEN1_LEARNEDCOPY
 TOOLCONFIG_OIL_PRESS_ABS_EQUIPPED
 GPEC2 Equipped

Equipped
 Equipped
 Cummins Equipped
 Equipped
 VMM Equipped
 Powernet Equipped
 CUSW () Equipped
 CUSW () Equipped
 Equipped
 Next Gen Bus Equipped
 Constant Heater Temperature Control Valve Equipped
 High Side Port Tumble Valve Equipped
 CMCV H Equipped
 Turbine Volute Valve Actuator Equipped
 H- Equipped
 Active Exhaust Valve Equipped
 Active Exhaust Pressure Sensor Equipped
 Engine Idle Shutoff Equipped
 Aisin RWD Transmission Equipped
 Cooled EGR Equipped
 Supercharger Equipped
 Low Temperature Radiator Coolant Pump Equipped
 Mechanical Coolant Pump Heater Equipped
 Auxiliary Coolant Pump Heater Equipped
 Compressed Natural Gas Equipped
 CUSW PROXI Write Programming Support Enabled
 Active Engine Mount Equipped
 ZF 9 Transmission Equipped
 HPT Transmission Equipped
 Variable Speed Fuel Pump Equipped
 Operator Idle Speed Request Equipped
 PTO System Equipped
 Air Shutoff Valve Bank 1 Control Solenoid 1 Equipped
 Air Shutoff Valve Bank 1 Control Solenoid 2 Equipped
 Air Shutoff Valve Bank 2 Control Solenoid 2 Equipped
 Dual Stage Oil Pump Equipped
 Auxiliary Coolant Pump Equipped
 Trans Skip Shift Equipped
 Trans Reverse Lockout Equipped
 Port Flap Valve Equipped
 Brushless PWM Fan Equipped
 V8 Engine

Primary Lin Alternator Equipped
Coolant On-Off Pump Equipped
Oil Pressure Sensor Enabled
VIN Learning Strategy Equipped
Dual Fuel Tank Equipped
Yaw Rate Sensor ESC Equipped
I3 Engine
Coolant On-Off Valve Equipped
Buffered Crank Output for ANC (Active Noise Cancellation) Equipped
Buffered Crank Output for PHEV Engine Pulse Calculation Equipped
Throttle Inlet Temp Sensor Equipped
Humidity, Temperature and Pressure Sensor (LIN) Equipped
Dual Fuel Pressure Sensor Equipped
Brake Pedal Sensor Equipped
Dual Fuel Tank Equipped
PTO System Equipped
Low Temp Radiator Coolant Pump Equipped
Engine Idle Shutoff Equipped
A/C Relay Powered from Engine Switched Battery
CNG Large Gas Tank Equipped
Cooled EGR Equipped
Supercharger Equipped
Hybrid MEC Shifter Equipped
Dual Alternator Capable
Auxillary Coolant Pump Equipped
ZF 9-Speed Trans Equipped
HPT Trans Equipped
CUSW Cruise Equipped
Power Steering Angle Sensor Mandatory
Throttle Inlet Temp Sensor Equipped
LIN Humidity, Temp, and Pressure Sensor Equipped
Dual Fuel Pressure Sensor Equipped
Brake Pedal Sensor Equipped
Clutch Sensor Equipped
SWAP HARDWIRED BRAKE SWITCH INPUTS
Mass Airflow System Equipped
Bi-Directional Crank Sensor Equipped
5 Button Cruise (LIN) Equipped
Operator Idle Speed Request Equipped
INTAKE EQUIPPED
Cylinder Pressure Sensor Equipped
Make Up Air Sensor Equipped

Active Exhaust Pressure Sensor Equipped

Secondary Mass Airflow Sensor Equipped

I3 Engine

Engine

Variable Valve Lift Equipped

Coolant On-Off Pump Equipped

Primary Lin Alternator Equipped

Electronic Parking Brake Equipped

Active Exhaust Valve(s) Equipped

Mechanical Coolant Pump Equipped

Aux Coolant Pump Heater Equipped

Heater Temp Control Valve Equipped

High Side Port Tumble Valve Equipped

Wastegate HBridge Equipped

Remote Start Present

Engine Oil Pressure Sensor Type

None

ICS CONFIGURATION

NAME	VALUE	UNITS
Display Type (Base)		
Display Type (Mid)		
Display Type (High)		

RFH CONFIGURATION

NAME	VALUE	UNITS
PIN Successfully Programmed		
VIN Successfully Programmed		
Valid Key In Ignition		
Keyless Go		
Ignition system type connected		
e-shifter present		
Auto Park Present		
Secret Codes Programmed		
Passive Entry		
RKE		
Module Configuration Status		
Remote Start Present		
Programmed by		
Hardware Configuration: Remote Start Antenna		
Hardware Configuration: Front Left Door Handle H/W		
Hardware Configuration: Front Right Door Handle H/W		
Hardware Configuration: Rear Left Door Handle H/W		

Hardware Configuration: Rear Right Door Handle H/W

Hardware Configuration: Trunk Door Handle H/W

RFHub Locked

Fob Location #1 Successfully Programmed

Fob Location #2 Successfully Programmed

Fob Location #3 Successfully Programmed

Fob Location #4 Successfully Programmed

Fob Location #5 Successfully Programmed

Fob Location #6 Successfully Programmed

Fob Location #7 Successfully Programmed

Fob Location #8 Successfully Programmed

Back Up Vehicle Config 1

Back Up Vehicle Config 2

Back Up Vehicle Config 3

Back Up Vehicle Config 4

Back Up Vehicle Config 5

Back Up Vehicle Config 6

Back Up Vehicle Config 7

Back Up ECU Configuration 1

Back Up ECU Configuration 2

Back Up ECU Configuration 3

Back Up ECU Configuration 4

Back Up ECU Configuration 5

Back Up ECU Configuration 6

Back Up ECU Configuration 7

Back Up ECU Configuration 8

Back Up ECU Configuration 9

Back Up ECU Configuration 10

Back Up ECU Configuration 11

Back Up ECU Configuration 12

Back Up ECU Configuration 13

Back Up ECU Configuration 14

Back Up ECU Configuration 15

Back Up ECU Configuration 16

Back Up ECU Configuration 17

Back Up Customer Settings Menu 1 ()

Back Up Customer Settings Menu 2 ()

Back Up Programmed ECUs: Cabin Network

Back Up Programmed ECUs: P/T Chassis Network

Secret Key Sent to Body Controller - Most recent attempt

Secret Key Sent to Body Controller - Original attempt

Base TPM Present

Full Size Matching Spare Tire Present

ECU Ship Status

Tire Pressure System

Selectable Tire Fill Alert

TPM Auto-Locate Enabled

TPMS Configuration

DTCM CONFIGURATION

NAME	VALUE	UNITS
Full-Time T-Case		
Front Locker Present		
Rear Locker Present		
FAD Present		
Mode Switch Present		
Left/Right Hand Drive		
Axle Ratio		
T-Case Type		
SRT Present		

ORC CONFIGURATION

NAME	VALUE	UNITS
Rollover Sensing		
EPPM		
Occupant Classification (OCM)		
Driver Seatbelt Buckle Switch		
Passenger Seatbelt Buckle Switch		
Left seat belt Switch		
Second Row Center seat belt Switch		
Right seat belt Switch		
Driver Seat Track Position Sensor		
Passenger Seat Track Position Sensor		
Passenger Occupant Detection Sensor		
Passenger Airbag Disable Switch		
Passenger Airbag Disable Indicator		
Driver Frontal Squib 1		
Driver Frontal Squib 2		
Driver Frontal Squib 3		
Passenger Frontal Squib 1		
Passenger Frontal Squib 2		
Passenger Frontal Squib 3		
Driver Knee Bolster Squib		
Passenger Knee Bolster Squib		

Driver Seatbelt Retractor Pretensioner
 Passenger Seatbelt Retractor Pretensioner
 Driver Seatbelt Load Limiter
 Passenger Seatbelt Load Limiter
 Driver Seatbelt Anchor Pretensioner
 Passenger Seatbelt Anchor Pretensioner
 Driver Seatbelt Buckle Pretensioner
 Passenger Seatbelt Buckle Pretensioner
 Left Curtain Squib 1
 Right Curtain Squib 1
 Left Side Seat Squib 1
 Right Side Seat Squib 1
 Left Seat Side Airbag
 Second Row Right Seat Side Airbag
 Driver Frontal Squib 4
 Passenger Frontal Squib 4
 Left Up-Front Acceleration Sensor
 Right Up-Front Acceleration Sensor
 Right B-Pillar Impact Acceleration Sensor
 Left B-Pillar Impact Acceleration Sensor
 Left C-Pillar Impact Acceleration Sensor
 Right C-Pillar Impact Acceleration Sensor
 Right D-Pillar Impact Acceleration Sensor
 Left D-Pillar Impact Acceleration Sensor
 Left Side Door Pressure Sensor
 Right Side Door Pressure Sensor
 Configuration Column Identifier

HVAC CONFIGURATION

NAME	VALUE	UNITS
DualZone ATC Control (Factory)		
DualZone ATC Control		
Dual Zone MTC Control		
Single Zone MTC Control		
MTC With EBL ()		
MTC Without EBL ()		
MTC heater only ()		

AMP CONFIGURATION

NAME	VALUE	UNITS
ANC Calibration Date - Year		
ANC Calibration Date - Week		

C Calibration Date - Patch

Current Calibration ID - Service

C Status

Surround Sound Activated

Door Module - Left Front

Door Module - Right Front

Premuim - 1

Premuim - 2

Premuim - 3

Non

No Rear Doors

No

IPC CONFIGURATION

NAME	VALUE	UNITS
Main Fuel Tank Gauge - Empty Stop Calibration		
Main Fuel Tank Gauge - Datum Calibration		
Main Fuel Tank Gauge - Datum Calibration		
Main Fuel Tank Gauge - Calibration		
Main Fuel Tank Gauge - Full Stop Calibration		
Sub Fuel Tank Gauge - Empty Stop Calibration		
Sub Fuel Tank Gauge - Datum Calibration		
Sub Fuel Tank Gauge - Datum Calibration		
Sub Fuel Tank Gauge - Calibration		
Sub Fuel Tank Gauge - Full Stop Calibration		

SCCM CONFIGURATION

NAME	VALUE	UNITS
Rear Wiper		
Tilt Telescope		
Paddle Shifter		
Cruise Control / ACC		

CONFIGURATION

NAME	VALUE	UNITS
RBSM		
LBMS		
PCM (Interior Bus)		
Radio		

ITM		
AMP		
EDM		
HVAC_R		
TBM		
AHLM/AFLS		
ABM		
BCM (P)		
DTCM		
PCM		
EPS		
ESM		
ABS		
RFH		
IPC		
ORC		
PTS		
SCCM		
ELSD		
TCM		
TPM		
AFLS		
ITBM		
OCM		
DPDM		
SGW		
ASBS		
ANC		
Number of Reprogramming Attempts - Counter #0		
Vehicle Configuration Programmed Status		
Last Programmed Status		
Last Configuration Odometer		miles
Vehicle Configuration Auto Write Counter		
Vehicle Configuration 1 - Write Counter		
Vehicle Configuration 2 - Write Counter		
Vehicle Configuration 3 - Write Counter		
Vehicle Configuration 4 - Write Counter		
Vehicle Configuration 5 - Write Counter		
Vehicle Configuration 6 - Write Counter		
Programmed ECUs: Cabin Network		
Programmed ECUs: P/T Chassis Network		
Programmed Network Configuration - Audio / Telematics Network		

Programmed ECUs: Hybrid LAN Network

ECU Configuration 1 (CBC Configurable Inputs and Outputs)

ECU Configuration 2 (CBC Features)

ECU Configuration 3

ECU Configuration 4

ECU Configuration 5 (Wireless)

ECU Configuration 5 (Doors)

ECU Configuration 5 (Memory)

ECU Configuration 6 (Brake)

ECU Configuration 6 (Suspension)

ECU Configuration 6 (Powertrain)

ECU Configuration 6 (Safety)

ECU Configuration 7 (CBC Exterior Lighting Calibrations)

ECU Configuration 8 (LIN and Miscellaneous)

ECU Configuration 9A

ECU Configuration 9 (ITM)

ECU Configuration 10

ECU Configuration 11

ECU Configuration 12

ECU Configuration 13

ECU Configuration 14

ECU Configuration 15 (CBC Features)

ECU Configuration 15 (Suspension)

Vehicle Configuration 7 - Write Counter

Vehicle Config CSM1

Vehicle Config CSM2

Model Year

Vehicle Line

Country Code

Left/Right Hand Drive

Remote Start Present

Drive Configuration

Emode Present

Auto Highbeam

Body Style

Maximum Vehicle Speed

Shifter Type

Performance Pages Present

Special Packages

PTS Configuration

Hill Descent Feature Present

Select Speed Control Feature Present

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT, 5 U.S.C. 552 (B) (6)

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT, 5 U.S.C. 552 (B) (6)

Power Inverter Type

Present

Rain Sensor Present

System Present

Air Conditioning Present

Cruise Feature is Present

Fluoride Glass Present

Full Size Spare

Off Road Capable

Special Package

Max Load Inflation Pressure Rear Tire

PSI

Max Load Inflation Pressure Front Tire

PSI

Light Load Inflation Pressure Rear Tire

PSI

Police Lighting Feature

Power Lift Gate Present

Power Right Sliding Door Present

Power Left Sliding Door Present

System Present

Sunshade Present

T-Case Type

Wheel Base

FOBIK Safe Enable

ELV Present

Fuel Capacity

gallons

Window Express Feature Configuration

Adjustable Pedal Feature Present (non-Memory)

Auto Headlamp Feature Present

Door Alert Feature Present

Present

Vehicle is an SRT

Disable Display of Radio Clock

Chassis Type

Display Outside Temperature Present

HVAC Configuration

Vehicle Brand

Display Compass Heading Present

Interior EC Mirror Present

ESCL system present

High Intensity Discharge Head Lamps

Secondary Lock Present

Liftgate/Trunk Type

Collision Mitigation System present

Forward Collision Warning present		
Base system present		
Premium system present		
Paddle Shift Feature Present		
Sport Mode Present		
Auto Park Present		
Passive Entry Present		
Keyless Go Present		
Transfer Case High Ratio		No Unit
Axle Ratio		
Transfer Case Low Range Reduction Ratio		
Dynamic Tire Circumference (All or Rear)		
Dual Rear Wheel (DRW) Vehicle Present		
Non-Regulated () Present		
Steering Ratio at		No Unit
Steering Ratio at Positive Angle 1		No Unit
Steering Ratio at Positive Angle 2		No Unit
Steering Ratio at Positive Angle 3		No Unit
Steering Ratio at Positive Angle 4		No Unit
Steering Ratio at Positive Angle 5		No Unit
Analog Door Sensor Configuration		
Air Quality System Present		
Steering Ratio at Negative Angle 1		No Unit
Steering Ratio at Negative Angle 2		No Unit
Steering Ratio at Negative Angle 3		No Unit
Steering Ratio at Negative Angle 4		No Unit
Steering Ratio at Negative Angle 5		No Unit
Ambient Light Dimmer Wheel Input Present G9		
Low Beam Output Present - A3,		
Rear Wiper Motor Park Present -		
Left Rear Door Ajar Input Present -		
Front Driver Analog Door Ajar Input Present -		
Reserved -		
Horn Switch Input Present -		
Reserved -		
Hood Ajar Switch Input Present -		
Hard Top Sense Present -		
Reserved -		
Reserved -		
Passenger Door Ajar Signal Present -		
Reserved -		

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Starter Relay Lowside Coil Drive - D7

Diesel Cabin Heater #2 Output Present - D9

Diesel Cabin Heater #3 Output Present -

Diesel Cabin Heater #1 Output Present -

Right Dedicated DRL Lamp Output Present -

Left Dedicated DRL Lamps Output Present -

Flasher Glass #2 Output Present

Foot Well Lamps Output Present -

Front Fog Lamps Output Present - A1 &

Inverter Enable Relay Output Present -

Reserved -

Gated Park ZFII Output Present - D-24

Reserved -

Rear Fog Lamps Output Present - &

Rear Park Lamps Output Present - &

Rear Turn Lamps Output Present - E3 &

Run-ACC Y Relay #2 Output Present - E9

Side Markers Output Present - &

Trailer Backup Lamps Output Present -

Reserved - F4

UGDO Feed Output Present -

Warning LED Output Present -

Park Brake Input Present -

Ambient Temperature Sensor Present -

Tip Start Enabled

Dual Start Relay System Present

Wiper Service Position Enabled

Trailer Tow Present

Quad Headlamps Enable

Horn Chirp Allowed

Bi Xenon Headlamps Enable

Hazard Lamp Configuration

Park Lamp Loadshed Enable

Front Fog Lamp Dropout Enable

Combined Rear Lighting Enable

Side Repeaters Enable

Lane Change

Exterior Light Loadshed Enable

Front Wiper Park Enable

Rear Wiper Park Enable

Reversible Washer Pump Enable

Tail Lamp

DRL Configuration		
DRL Lamp Location		
DRL Dropout Enable		
Tunnel Detection		
Military Vehicle Present		
LED Reverse Lamps Present		
LED Stop Lamps Present		
LED Rear Turn Lamps Present		
LED Tail Lamps Present		
LED Rear Fog Lamps Present		
LED License Lamps Present		
LED Front Turn Lamps Present		
LED Front Fog Lamps Present		
LED Dedicated DRL Present		
LED Low Beam Lamps Present		
LED High Beam Lamps Present		
LED Front Park/Marker Lamps Present		
Door Lock Switch Signal FT LT Usage (F9)		
Door Lock Switch Signal FT RT Usage (F23)		
Headlamp Wash Interval		
Headlamp Wash Shot		
Front Wiper Wipes After Wash		
Headlamp Washer Low Fluid Shut-Off Enable		
Intermittent Wiper States		
LED CHMSL Lamp Present		
Rear Camera Present		
Power Inverter Present		
Front Park Assist Present		
Front Heated Seats Present		
Front Ventilated Seats Present		
Destination		
Cabin Equilization Curve Number		
Hill Start Assist Customer Setting Option Present		
Radio Apps Present		
CTP Easy Entry Enable		
CTP Passive Entry Present		
CTP Auto Lock Disable		
SDAR Travel Link Present		
DAB Present		
Vehicle Theft Alarm Present		
Heated Steering Wheel Present		
VIN Check Digit Diable		

Surround Sound Feature Present

Present

Antenna Type

CTP Max AC Present

Hybrid Electric Powertrain Present

Disable CD Eject

DTV Front Camera Present

DTV Side Camera Present

Tow Haul Present

Hill Descent Control Present

Audio Steering Wheel Switch Configuration

Radio Display On/Off Softkey Present

Microphone Tuning Parameter

Microphone Configuration

Microphone Type

External Port Type

Splashscreen Type

ERS Available

Rear Wheel Dually

Max Gear

Virtual Speedometer Units

Speedometer Range Max Scale

IC Config Feature

PTO Present

AMB Dimmer

Heated Seat Present

Split Shaft Present

Manual Headlamp Leveling

Gear Shift Indicator

Service Interval

Temperature Celsius for UK

Type of Gallons

Tip Start Present

5 Trunk Lock

Airport Scenario Trunk Set

1 Left Front

Right Front

Left Rear

AP4 Right Rear

Global Up

Global Down

Sun Shade

Puddle Lamp Present		
Rear Door Pre Short Drop		
Passenger Window Lockout		
Auto Power Folding Mirrors Present		
Folding mirrors present		
Heated Mirrors Present		
Minor turn signals present		
Driver Memory Mirrors Present		
Passenger Memory Mirror Present		
Electro-chromatic driver mirror present		
Electro-chromatic passenger mirror present		
Tow Mirror Present		
Blindspot Mirror Present		
Window Motor Type		
Window Hall Sensors Present		
Frameless Window Present		
Memory Adjustable Pedals Present		
Tilt/Telescope Steering Present		
Memory Seat Present		
Rear Heated Seats Present		
Front Vented Seats Present		
Heated Steering Wheel Present		
Heated Seat Material Type		
Heated Wheel Material Type		
Rear Vented Seats Present		
Front Heated Seat Present		
Brake System ECU Configuration A		
Wheel overall ESC Maserati		
Brake System ECU Configuration B		
ECO Mode Configuration		
Alternator Present		
ODS Present		
Driver Kneebag Present		
Passenger Kneebag Present		
Curtain Airbags Present		
Tow Hooks Present		
Passive Present		
2nd Ro Present		
Reserved		
Reserved		
Integrated EPP Present		
BUX vehicle		

Signature Light Present		
Dual Filament Headlamp		
Front Turn Lamp Diagnostics		
Auto Headlamp On Threshold		Volt
Auto Headlamp Off Threshold		Volt
Left Low Beam Voltage Regulation		
Left High Beam Voltage Regulation		
Right Low Beam Voltage Regulation		
Right High Beam Voltage Regulation		
Left Front Corner Voltage		
Right Front Corner Voltage		
Left Rear Corner Voltage		
Right Rear Corner Voltage		
Panic Enable		
Compass Mounting Orientation		
Washer Fluid Level Voltage Threshold		
IBS Present		
M Present		
Humidity Sensor Present		
Manual Trans Present		
DC to DC Converter Present		
M Present		
Auto Relock Time		seconds
System Present		
DC to DC Converter #2 Present		
Illuminated Approach Interior Lighting Target Percentage		
Illuminated Approach Headlamp Target Percentage		
Illuminated Approach Taillamp Target Percentage		
Illuminated Approach Interior Lighting Ramp Up Time		
CRVMM Present		
EVIC Switch Module Present		
Compass Mounting Angle	0	Degree
Signature Lamps or Mirror Repeater Present - Pin A5 & Pin A7		
Backup Reverse Lamp Left Present - Pin F41		
Backup Reverse Lamp Right Present - Pin		
Stop/Turn Lamp or Stop Lamp Present Pin &		
Left High Beam Present - Pin D1		
Right High Beam Present - Pin A2		
Left Front Lamp Diagnostics Present - Pin		
Right Front Lamp Diagnostics Present - Pin		
Left Rear Turn Lamp Diagnostics Present - Pin		
Right Rear Turn Lamp Diagnostics Present - Pin		

Brake Fluid Level Switch Signal Present - Pin		
Siren		
Ultrasonics		
Tilt		
Swing Gate Lock Present -		
Swing Gate Unlock Present - Pin		
Front Fog Voltage		Volts
Rear Fog Voltage		Volts
Lamp Output Disable		
Secondary Door Ajar Present - Pin		
Manual Door Locks Present		
Rain Sensor Module #2 Present		
Auto High Beam Module Location		
Average Last Longitudinal Acceleration Values		
Average Last Lateral Acceleration Values		
Excess Longitudinal Acceleration Factor		
Excess Lateral Acceleration Factor		
Brake Smoothing Duration		
Brake Smoothing Factor		
Steering Smoothing Duration		
Steering Smoothing Factor		
Steering Smoothing Threshold		
Brake Smoothing Threshold		
Maximum Longitudinal Change		
Maximum Lateral Change		
Acceleration Threshold		
Acceleration Factor		
Nose Dive Threshold		
Nose Dive Factor		
RKE Auto-Relock Feature Enable		
PE Auto-Relock Feature Enable		
VTA Hood Ajar Monitoring		
Horn Chirp Duration		
Pitch and Roll Present		
Parking Light Enable		
ASBM Minimum Voltage Time		
ASBM Battery Minimum Voltage		
Interior Lighting Night Threshold		Volt
Interior Lighting Day Threshold		Volt
Axle Locker Configuration		
Transmission Equipped		
Park Brake Type		

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552 (B) (6)

Hybrid Type

Module Present

R feature Present

Present

Temperature Display Resolution

PTV Present

Glovebox Control

Glare Free Present

Brake Type

Suspension Type

Park assist customer settings menu

Park assist brake customer settings menu

Park assist front volume customer settings menu

Park assist rear volume customer settings menu

Electric power steering customer settings menu

Forward collision warning customer settings menu

Auto on driver comfort customer settings menu

Auxiliary switches customer settings menu

Rear view camera gridlines customer settings menu

Unit set customer settings menu

Power accessory delay customer settings menu

Ambient dimmer customer settings menu

Tire jack mode customer settings menu

Air suspension warning customer settings menu

Automatic aero mode customer settings menu

Auto high beam customer settings menu

Auto park customer settings menu

Blind spot alert customer settings menu

Clock display customer settings menu

Compass calibration customer settings menu

Compass variance customer settings menu

Consumption unit customer settings menu

Distance unit customer settings menu

Auto door lock customer settings menu

Easy exit seat customer settings menu

Auto entry exit mode customer settings menu

service mode customer settings menu

Headlamp drop customer settings menu

Headlamp off delay customer settings menu

Headlamps on with wiper customer settings menu

Passive entry customer settings menu

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552 (B) (6)

Illuminated approach customer settings menu
 Lane departure torque customer settings menu
 Lane departure warning customer settings menu
 Rear camera customer settings menu
 Rain sensitive wipers customer settings menu
 Power take off customer settings menu
 Pressure unit customer settings menu
 Power unit customer settings menu
 Power liftgate chime customer settings menu
 Performance shiftable customer settings menu
 Rear view camera delay customer settings menu
 RKE unlock customer settings menu
 Speed unit customer settings menu
 Tilt mirror in reverse customer settings menu
 Torque unit customer settings menu
 Teen Key Fuel Pop-up Customer Settings Menu
 Teen Key Automatic High Beam Customer Settings Menu
 Passenger Airbag On/Off Customer Settings Menu
 Forward Collision Warning and Brake Customer Settings Menu
 Doors and Engine Off Power Delay Customer Settings Menu
 Radio Speaker Open Circuit Disable (LF)
 Radio Speaker Open Circuit Disable (RF)
 Radio Speaker Open Circuit Disable (LR)
 Radio Speaker Open Circuit Disable (RR)
 C Calibration Parameter Data Set
 Surround View Camera On/Off Softkey Present
 Drive Mode
 Rear Defrost and Heated Mirrors Present
 Show Phone Information in Cluster
 Auto Dimming Mirror Hard Button Present
 Clari-Fi Present
 Automatic Crash Notification Feature Present
 Trailer Hitch Camera Present
 Park Assist Tuning Set
 Rear Defrost Presence
 Heated Mirrors Present
 Engine Displacement
 Steering C Factor
 Speedometer Tolerance
 Increasing speed constant
 Tachometer Type
 DTV Present

ms

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552 (B) (6)

Present

RADIO CONFIGURATION

NAME		
Satellite Subscription ID		
Satellite Subscription Status		
Satellite Subscription Reason Code		
Satellite Subscription Suspend		
Satellite Subscription Suspend Month		
Satellite Subscription Suspend		
Button		
SDARS		
Navigation Active		
Cellular		
Internal CD Player		
Wi-Fi		
Bluetooth		
Application Framework		
FM Diversity		
Clock Defeat		
Automated Loudness		
Anti-Theft Enable Status		
Selection		
Front Seat Video Playback		
Cabin EQ Curve Number Currently Used by		
Splash Screen		
Compass on the bus messaging Authorization		
GPS on the Bus messaging Authorization		
USB Hubs Detected		
SD Card Readers Detected		Unit
Enumerated USB Devices		
Aux Jack		
DTV Short Term Configuration		

ABSO CONFIGURATION

NAME	VALUE	
Vehicle Line Identification		
Displacement		
Hybrid Type		
Trans Type		
Drive Configuration		
Chassis Type		

SessionID #

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Axle Ratio

No Unit

Tire Circumference

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WI
TECH

VEHICLE SCAN REPORT

Vehicle
VIN

DI TURBO PHEV ENGINE

Odometer

Publication Date

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	CURRENT VIN	ORIGINAL VIN	PART #
TCM	Transmission Control Module	CAN-C				
PCM	Powertrain Control Module					
ICS	Integrated Center Stack					
RFH	Radio Frequency Hub					
ESM	Electronic Shifter					
DTCM	Drive Train Control Module					
ORC	Occupant Restraint					
EPS	Electric Power Steering					
HVAC	Heat, Ventilation and A/C					
CSWM	Comfort Seat Wheel Module					
AMP	Amplifier					
IPC	Instrument Panel Cluster					
SCCM	Steering Column Control Module					
BCM	Body Controller					
RADIO	Radio					
OCM	Occupant Classification					
BPCM	Battery Pack Control Module					
HCP	Hybrid Control Processor					
AHCP	Auxiliary Hybrid Control Processor					

SessionID #

(B)(6)

INFORMAL

REDACTED PUR

SUM

STATUS

Frequency Counter

Ignition Cycle Counter

0

0 | Stored | Implausible Data Received From

NAME	VALUE	UNITS
DTC		
Test Failed		
Test Failed This Operation Cycle		
Pending DTC		
Confirmed DTC		
Test Not Completed Since Last Clear		
Test Failed Since Last Clear		
Test Not Completed This Operation Cycle		
Warning Indicator Requested		
DTC Extended Data Record Number - All		
Occurrence flag		
Original Odometer Value		miles
Most Recent Odometer Value		miles
Frequency Counter		
Ignition Cycle Counter		
System Battery Voltage		Volts
Module Battery Voltage		Volts
Transference motor position sensor supply voltage		Volts
Transference Motor Current		Amps
Transference Position Sensor		Volts
Temperature		°F
Transference Motor Duty Cycle		%
Transference Motor Direction State		
Front Axle Locker Sensor Feedback		
Rear Axle Locker Sensor Feedback		
Front Axle Locker Low side Driver		
Rear Axle Locker Low side Driver		
FAD Supply Power Voltage		Volts
FAD Feedback Status		
FAD Feedback Voltage		Volts
FAD Lock request		
Transference Mode Switch		
Time Since Last Ignition On	0	minutes
Vehicle Speed		MPH
Left Front Wheel Speed	0.0	rpm
Right Front Wheel Speed	0.0	rpm
Left Rear Wheel Speed	0.0	rpm

Right Rear Wheel Speed		rpm
Brake Pedal		
ESP Requested Center (Transercase) Differential State		
ESP Requested Center Differential Torque		Ft-Lbs
Steering Wheel Angle		degrees
Delta Steering Wheel Angle		degrees
Ambient Air Temperature		°F
PRND Display		
Transmission Current Gear		
Throttle Pedal Position		%
Static Engine/Electric Motor Torque		Ft-Lbs
Engine RPM		rpm
Actual Mode of Transercase Clutch		
Actual Transercase Clutch Lock Torque		Ft-Lbs
Desired Transercase Clutch Lock Torque		Ft-Lbs
T-Case Motor Incremental Position Sensor (IPS)		degrees
T-Case Clutch Wear IPS Position		degrees
DTCM Internal DTC Reason		
Transfer Case Shift Inhibited		
Transercase Status		
Axle Locker Status (Bus)		
Clutch Calibration Not Learned reason		
Electric Motor RPM		rpm
T-Case Clutch Wear Position (Initial)		degrees

RADIO | Active | Head Unit Button-Stuck

NAME	VALUE	UNITS
DTCTable		
TestFailed		
TestFailedThisMonitoringCycle		
Pending DTC		
Confirmed DTC		
Test Not Completed This Monitoring Cycle		
Warning Indicator Requested		
DTCExtendedDataRecordNumber		
Occurance Flag		
Reserved		
Original Odometer Value		miles
Most Recent Odometer Value		miles
Frequency Counter		
Ignition Counter		

Event Counter

RADIO | | Stored | CAN C Bus Off Performance-

NAME	VALUE	
DTCTable		
TestFailed		
TestFailedThisMonitoringCycle		
Pending DTC		
Confirmed DTC		
Test Not Completed This Monitoring Cycle		
Warning Indicator Requested		
DTCExtendedDataRecordNumber		
Occurance Flag		
Reserved		
Original Odometer Value		
Most Recent Odometer Value		
Frequency Counter		
Ignition Counter		
Event Counter		

| | Stored | Hybrid Battery Precharge Contactor Circuit-

NAME	VALUE	
DTC		
Test Failed		
Test Failed This Operation Cycle		
Pending DTC		
Confirmed DTC		
Test Not Completed Since Last Clear		
Test Failed Since Last Clear		
Test Not Completed This Operation Cycle		
Warning Indicator Requested		
Occurrence flag		
Original Odometer Value		
Most Recent Odometer Value		
Frequency Counter	1	
Ignition Cycle Counter		
- for this DTC (lifetime fails)	1	
FoM - for this DTC (lifetime fails counts on pass)		
FoM - for this DTC (lifetime longest fail on pass)		
Battery Total Time Awake		
Key in Ignition		

EPT -WakeUp	
HCP Contactor Command	
Qualified Contactor Command - QCC	
Verified Contactor Command - VCC	
Contactor Status	
Plug in Status	
Balance Mode	
Vehicle Speed	
System Volts at time of fault	
Battery Lifetime AmpHrs of Charge	
Battery Lifetime AmpHrs of DisCharge	
HVIL Status -Vehicle	
Cycles left to self heal	No Unit
HV Battery Charge Power 2sec	
HV Battery Charge Power 10sec	
HV Battery Discharge Power 2sec	
HV Battery Discharge Power 10sec	
Key - DriveRdy (CAN)	
Battery Lifetime Number Of Closes	
Battery Full AmpHr Capacity	
Battery Cell Voltage Maximum	
Battery Cell Voltage Minimum	
Battery Cell Voltage Average	
Battery Temperature Maximum Module	°F
Battery Temperature Minimum Module	°F
Battery Temperature Average Module	°F
Battery Temperature Number of Failing Sensors	
DTC Extended Data Record Number - All	
DTC Extended Data Record Number - 2	
HV Battery Charge Power	
HV Battery Discharge Power	
Key Position	
SOC	
HV Bat SOH-R	
HV Bat SOH-C	
Cell Impedance Max Discharge	
Cell Impedance Min Discharge	
HVIL Status - Battery pack	
HVIL PWM Duty Cycle source - Vehicle	
HVIL PWM Duty Cycle Sink - Battery	
HVIL PWM Duty Cycle Source - Battery	
HVIL PWM Duty Cycle Sink - Battery	

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (5 U.S.C. 552 (B) (6))

HVIL PWM Frequency source - Vehicle		Hz
HVIL PWM Frequency Sink - Vehicle		Hz
HVIL PWM Frequency Source - Battery		Hz
HVIL PWM Frequency Sink - Battery		Hz
HVIL Returned current - Vehicle		mA
HVIL Returned current - Battery		mA
Battery Cell Highest Cell number		
Battery Cell Lowest Cell number		
HV Battery Current Sensor Primary		Amps
HV Battery Current Sensor Secondary		Amps
HV Battery Current HVBatCmt		Amps
HV Battery Voltage (cell sum)		
HV Battery Voltage (Module Sum)		
HV Sensor-Pack Voltage		
HV Sensor-DC Link Voltage		
HV Sensor-main fuse Voltage		
HV Sensor-IDCM fuse Voltage		
HV Sensor - Heater fuse Voltage		
Battery Temperature Highest Sensor number		
Battery Temperature Lowest Sensor number		
HV Cooling Battery coolant inlet temp		
HV Cooling Battery coolant outlet temp		
BPCM temperature max		
BPCM temperature min		
Vehicle Isolation Impedance (Positive side)		
Vehicle Isolation Impedance (Negative side)		
Vehicle Isolation Impedance (Equivalent)		
Battery Isolation Impedance (Positive side)		
Battery Isolation Impedance (Negative side)		
Battery Isolation Impedance (Equivalent)		
Cn Open		
Cn Short to SWn		
Auxiliary channel 1 Open		
Auxiliary channel 2 Open		
Measured result difference between Alternative path and Primary path is out of range		
Balancing Switch Short		
Balancing Switch Open		
Alternate reference voltage is out of range		
Vaa voltage is out of range		
Level-shift amplifier offset voltage is out of range		
Stuck ADC output bits verification with scale		
Stuck ADC output bits verification with full-scale		

Multiplexer Open/Short verification with X test current source

Multiplexer Open/Short verification with X test current sources

Measured result difference between Module voltage and Cell voltage summation

Vhv - Vdcin > Vhvov

Vhv < Vhvuv

Die Temperature is over the upper limit

Warning for cell information is not complete

ADC Data Path error

Packet Error Check

Power-on reset event occurred

32kHz oscillator frequency is not within of its expected value

Same as Alrtosc1 (redundant alert)

Die Temperature is over the upper limit

Module number addressing is fail

Alive counter is not matched to the expected value

PEC Bits in Data-check byte error

is too low

Transmit data is not equal to read back data

Engine Speed

Accelerator position

GPS_Date - Year

GPS_Date - Month

GPS_Date - Day

UTC_Time -

UTC_Time - Minutes

UTC_Time -

BPCM | Stored | Hybrid/EV Battery System Precharge "A" Time Too Long

NAME	VALUE	UNITS
DTC		
Test Failed		
Test Failed This Operation Cycle		
Pending DTC		
Confirmed DTC		
Test Not Completed Since Last Clear		
Test Failed Since Last Clear		
Test Not Completed This Operation Cycle		
Warning Indicator Requested		
Occurrence flag		
Original Odometer Value		
Most Recent Odometer Value		
Frequency Counter		

Ignition Cycle Counter	0	
FoM - for this DTC (lifetime fails)	1	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake		seconds
Key in Ignition		
ECU-WakeUp		
HCP Contactor Command		
Qualified Contactor Command - QCC		
Verified Contactor Command - VCC		
Contactor Status		
Plug in Status		
Balance Mode		
Vehicle Speed		MPH
System () Volts at time of fault		Volts
Battery Lifetime of Charge		AHr
Battery Lifetime of DisCharge		AHr
HVIL Status -Vehicle		
Cycles left to self heal		No Unit
HV Battery Charge Power 2sec		
HV Battery Charge Power 10sec		
HV Battery Discharge Power 2sec		
HV Battery Discharge Power 10sec		
Key - DriveRdy (CAN)		
Battery Lifetime Number Of Closes		
Battery Full AmpHr Capacity		
Battery Cell Voltage Maximum		
Battery Cell Voltage Minimum		
Battery Cell Voltage Average		
Battery Temperature Maximum Module		°F
Battery Temperature Minimum Module		°F
Battery Temperature Average Module		°F
Battery Temperature Number of Failing Sensors		
DTC Extended Data Record Number - All		
DTC Extended Data Record Number - 2		
HV Battery Charge Power		
HV Battery Discharge Power		
Key Position		
SOC		%
HV Bat SOH-R		%
HV Bat SOH-C		%

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Cell Impedance Max Discharge		mOhms
Cell Impedance Min Discharge		
HVIL Status - Battery pack		
HVIL PWM Duty Cycle source - Vehicle		
HVIL PWM Duty Cycle Sink - Battery		
HVIL PWM Duty Cycle Source - Battery		
HVIL PWM Duty Cycle Sink - Battery		
HVIL PWM Frequency source - Vehicle		
HVIL PWM Frequency Sink - Vehicle		
HVIL PWM Frequency Source - Battery		
HVIL PWM Frequency Sink - Battery		
HVIL Returned current - Vehicle		
HVIL Returned current - Battery		
Battery Cell Highest Cell number		
Battery Cell Lowest Cell number		
HV Battery Current Sensor Primary		
HV Battery Current Sensor Secondary		
HV Battery Current HVBatCmt		
HV Battery Voltage (cell sum)		
HV Battery Voltage (Module Sum)		
HV Sensor-Pack Voltage		
HV Sensor-DC Link Voltage		
HV Sensor-main fuse Voltage		
HV Sensor- IDCM fuse Voltage		
HV Sensor - Heater fuse Voltage		
Battery Temperature Highest Sensor number		
Battery Temperature Lowest Sensor number		
HV Cooling Battery coolant inlet temp		
HV Cooling Battery coolant outlet temp		
BPCM temperature max		
BPCM temperature min		
Vehicle Isolation Impedance (Positive side)		
Vehicle Isolation Impedance (Negative side)		
Vehicle Isolation Impedance (Equivalent)		
Battery Isolation Impedance (Positive side)		
Battery Isolation Impedance (Negative side)		
Battery Isolation Impedance (Equivalent)		Mega Ohms
Cn Pin Open		

Cn Short to SWn

Auxiliary channel 1 [REDACTED] Open

Auxiliary channel 2 [REDACTED] Open

Measured result difference between Alternative path and Primary path is out of range

Balancing Switch Short

Balancing Switch Open

Alternate reference voltage is out of range

Vaa voltage is out of range

Level-shift amplifier offset voltage is out of range

Stuck [REDACTED] output bits verification with [REDACTED]-scale

Stuck [REDACTED] output bits verification with full-scale

Multiplexer Open/Short verification with [REDACTED] HVMUX test current source

Multiplexer Open/Short verification with [REDACTED] HVMUX test current sources

Measured result difference between Module voltage and Cell voltage summation

Vhv - Vdcin > Vhvov

Vhv < Vhvuv

Die Temperature is over the upper limit

Scanning for cell information is not complete

[REDACTED] Data Path error

Packet Error Check

Power-on reset event occurred

32kHz oscillator frequency is not within [REDACTED] of its expected value

Same as Alrtosc1 (redundant alert)

Die Temperature is over the upper limit

Module number addressing is fail

Alive counter is not matched to the expected value

[REDACTED] C Bits in Data-check byte error

[REDACTED] is too low

Transmit data is not equal to read back data

Engine Speed

Accelerator position

GPS_Date - Year

GPS_Date - Month

GPS_Date - Day

UTC_Time - Hours

UTC_Time - Minutes

UTC_Time - Seconds

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552 (B) (6)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Test Failed		
Test Failed This Operation Cycle		
Pending DTC		
Confirmed DTC		
Test Not Completed Since Last Clear		
Test Failed Since Last Clear		
Test Not Completed This Operation Cycle		
Warning Indicator Requested		
Occurrence flag		
Original Odometer Value		miles
Most Recent Odometer Value		miles
Frequency Counter		
Ignition Cycle Counter		
FoM - for this DTC (lifetime fails)		events
FoM - for this DTC (lifetime fails counts on pass)		
FoM - for this DTC (lifetime longest fail on pass)		
Battery Total Time Awake		
Key in Ignition		
EPT -WakeUp		
HCP Contactor Command		
Qualified Contactor Command - QCC		
Verified Contactor Command - VCC		
Contactor Status		
Plug in Status		
Balance Mode		
Vehicle Speed		MPH
System (at time of fault		Volts
Battery Lifetime AmpHrs of Charge		AHr
Battery Lifetime AmpHrs of DisCharge		AHr
HVIL Status -Vehicle		
Cycles left to self heal		No Unit
HV Battery Charge Power 2sec		watts
HV Battery Charge Power 10sec		watts
HV Battery Discharge Power 2sec		watts
HV Battery Discharge Power 10sec		watts
Key - DriveRdy (CAN)		
Battery Lifetime Number Of Closes		
Battery Full AmpHr Capacity		AmpHrs
Battery Cell Voltage Maximum		mV
Battery Cell Voltage Minimum		mV
Battery Cell Voltage Average		mV
Battery Temperature Maximum Module		°F

Battery Temperature Minimum Module		°F
Battery Temperature Average Module		°F
Battery Temperature Number of Failing Sensors		
DTC Extended Data Record Number - All		
DTC Extended Data Record Number - 2		
HV Battery Charge Power		watts
HV Battery Discharge Power		watts
Key Position		
SOC		%
HV Bat SOH-A		%
HV Bat SOH-C		%
Cell Impedance Max Discharge		mOhms
Cell Impedance Min Discharge		mOhms
HVIL Status - Battery pack		
HVIL PWM Duty Cycle source - Vehicle		%
HVIL PWM Duty Cycle Sink - Battery		%
HVIL PWM Duty Cycle Source - Battery		%
HVIL PWM Duty Cycle Sink - Battery		%
HVIL PWM Frequency source - Vehicle		Hz
HVIL PWM Frequency Sink - Vehicle		Hz
HVIL PWM Frequency Source - Battery		Hz
HVIL PWM Frequency Sink - Battery		Hz
HVIL Returned current - Vehicle		mA
HVIL Returned current - Battery		mA
Battery Cell Highest Cell number		
Battery Cell Lowest Cell number		
HV Battery Current Sensor Primary		Amps
HV Battery Current Sensor Secondary		Amps
HV Battery Current HVBatCmt		Amps
HV Battery Voltage (cell sum)		Volts
HV Battery Voltage (Module Sum)		Volts
HV Sensor-Pack Voltage		Volts
HV Sensor-DC Link Voltage		Volts
HV Sensor-main fuse Voltage		Volts
HV Sensor- IDCM fuse Voltage		Volts
HV Sensor - Heater fuse Voltage		Volts
Battery Temperature Highest Sensor number		
Battery Temperature Lowest Sensor number		
HV Cooling Battery coolant inlet temp		°F
HV Cooling Battery coolant outlet temp		°F
temperature max		°F
temperature		°F

Vehicle Isolation Impedance (Positive side)		Mega Ohms
Vehicle Isolation Impedance (Negative side)		Mega Ohms
Vehicle Isolation Impedance (Equivalent)		Mega Ohms
Battery Isolation Impedance (Positive side)		Mega Ohms
Battery Isolation Impedance (Negative side)		Mega Ohms
Battery Isolation Impedance (Equivalent)		Mega Ohms
Pin Open		
Cn Short to SWn		
Auxiliary channel 1 Pin Open		
Auxiliary channel 2 Pin Open		
Measured result difference between Alternative path and Primary path is out of range		
Balancing Switch Short		
Balancing Switch Open		
Alternate reference voltage is out of range		
Vaa voltage is out of range		
Level-shift amplifier offset voltage is out of range		
Stuck ADC output bits verification with scale		
Stuck ADC output bits verification with full-scale		
Multiplexer Open/Short verification with HVMUX test current source		
Multiplexer Open/Short verification with HVMUX test current sources		
Measured result difference between Module voltage and Cell voltage summation		
$V_{hv} - V_{dcin} > V_{hvov}$		
$V_{hv} < V_{hvvv}$		
Die Temperature is over the upper limit		
Scanning for cell information is not complete		
ADC Data Path error		
Packet Error Check		
Power-on reset event occurred		
32kHz oscillator frequency is not within of its expected value		
Same as Alrtosc1 (redundant alert)		
Die Temperature is over the upper limit		
Module number addressing is fail		
Alive counter is not matched to the expected value		
PEC Bits in Data-check byte error		
is too low		
Transmit data is not equal to read back data		
Engine Speed		rpm
Accelerator position		%
GPS_Date - Year		Year
GPS_Date - Month		
GPS_Date - Day		Days
UTC_Time - Hours		Hours

UTC_Time - Minutes	0	
UTC_Time -	0	seconds

BPCM | | Stored | Battery Energy Control Module High Voltage System Interlock Out of Range Low-

NAME	VALUE	UNITS
DTC	.	
Test Failed		
Test Failed This Operation Cycle		
Pending DTC		
Confirmed DTC		
Test Not Completed Since Last Clear		
Test Failed Since Last Clear		
Test Not Completed This Operation Cycle		
Warning Indicator Requested		
Occurrence flag		
Original Odometer Value		miles
Most Recent Odometer Value		miles
Frequency Counter	1	
Ignition Cycle Counter		
FoM - for this DTC (lifetime fails)		events
FoM - for this DTC (lifetime fails counts on pass)		seconds
FoM - for this DTC (lifetime longest fail on pass)		seconds
Battery Total Time Awake		seconds
Key in Ignition		
EPT -WakeUp		
HCP Contactor Command		
Qualified Contactor Command - QCC		
Verified Contactor Command - VCC		
Contactor Status		
Plug in Status		
Balance Mode		
Vehicle Speed		MPH
System () Volts at time of fault		Volts
Battery Lifetime AmpHrs of Charge		AHr
Battery Lifetime AmpHrs of DisCharge		AHr
HVIL Status -Vehicle		
Cycles left to self heal		No Unit
HV Battery Charge Power		watts
HV Battery Charge Power		watts
HV Battery Discharge Power		watts
HV Battery Discharge Power		watts
Key - DriveRdy (CAN)		

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552 (B) (6)

Battery Lifetime Number Of Closes		
Battery Full AmpHr Capacity		Amphrs
Battery Cell Voltage Maximum		mV
Battery Cell Voltage Minimum		mV
Battery Cell Voltage Average		mV
Battery Temperature Maximum Module		°F
Battery Temperature Minimum Module		°F
Battery Temperature Average Module		°F
Battery Temperature Number of Failing Sensors		
DTC Extended Data Record Number - All		
DTC Extended Data Record Number - 2		
HV Battery Charge Power		watts
HV Battery Discharge Power		watts
Key Position		
SOC		%
HV Bat SOH-R		%
HV Bat SOH-C		%
Cell Impedance Max Discharge		mOhms
Cell Impedance Min Discharge		mOhms
HVIL Status - Battery pack		
HVIL PWM Duty Cycle source - Vehicle		%
HVIL PWM Duty Cycle Sink - Battery		%
HVIL PWM Duty Cycle Source - Battery		%
HVIL PWM Duty Cycle Sink - Battery		%
HVIL PWM Frequency source - Vehicle		Hz
HVIL PWM Frequency Sink - Vehicle		Hz
HVIL PWM Frequency Source - Battery		Hz
HVIL PWM Frequency Sink - Battery		Hz
HVIL Returned current - Vehicle		mA
HVIL Returned current - Battery		mA
Battery Cell Highest Cell number		
Battery Cell Lowest Cell number		
HV Battery Current Sensor Primary		Amps
HV Battery Current Sensor Secondary		Amps
HV Battery Current HVBatCmt		Amps
HV Battery Voltage (cell sum)		Volts
HV Battery Voltage (Module Sum)		Volts
HV Sensor-Pack Voltage		Volts
HV Sensor-DC Link Voltage		Volts
HV Sensor-main fuse Voltage		Volts
HV Sensor-IDCM fuse Voltage		Volts
HV Sensor-Heater fuse Voltage		Volts

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Battery Temperature Highest Sensor number

Battery Temperature Lowest Sensor number

HV Cooling Battery coolant inlet temp

HV Cooling Battery coolant outlet temp

BPCM temperature max

BPCM temperature min

Vehicle Isolation Impedance (Positive side)

Vehicle Isolation Impedance (Negative side)

Vehicle Isolation Impedance (Equivalent)

Battery Isolation Impedance (Positive side)

Battery Isolation Impedance (Negative side)

Battery Isolation Impedance (Equivalent)

Cn Open

Cn Short to SWn

Auxiliary channel 1 Open

Auxiliary channel 2 Open

Measured result difference between Alternative path and Primary path is out of range

Balancing Switch Short

Balancing Switch Open

Alternate reference voltage is out of range

Vaa voltage is out of range

Level-shift amplifier offset voltage is out of range

Stuck ADC output bits verification with

Stuck ADC output bits verification with full-scale

Multiplexer Open/Short verification with X test current source

Multiplexer Open/Short verification with X test current sources

Measured result difference between Module voltage and Cell voltage summation

Vhv - Vdcin > Vhvv

Vhv < Vhvv

Die Temperature is over the upper limit

Scanning for cell information is not complete

ADC Data Path error

Packet Error Check

Power-on reset event occurred

32kHz oscillator frequency is not within of its expected value

Same as Alrtosc1 (redundant alert)

Die Temperature is over the upper limit

Module number addressing is fail

Alive counter is not matched to the expected value

C Bits in Data-check byte error

is too low

Transmit data is not equal to read back data

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552 (B) (6)

Engine Speed	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	seconds

HCP | [REDACTED] | Active | Drive Motor B Inverter Performance-

NAME	VALUE	UNITS
DTC	[REDACTED]	
Test Failed	[REDACTED]	
Test Failed This Operation Cycle	[REDACTED]	
Pending DTC	[REDACTED]	
Confirmed DTC	[REDACTED]	
Test Not Completed Since Last Clear	[REDACTED]	
Test Failed Since Last Clear	[REDACTED]	
Test Not Completed This Operation Cycle	[REDACTED]	
Warning Indicator Requested	[REDACTED]	
DTC Extended Data Record Number	[REDACTED]	
Occurrence flag	[REDACTED]	
Original Odometer Value	[REDACTED]	miles
Most Recent Odometer Value	[REDACTED]	miles
Frequency Counter	[REDACTED]	
Ignition Cycle Counter	[REDACTED]	
Microcontroller reset reason - [REDACTED] 0	[REDACTED]	
Microcontroller reset reason - [REDACTED]	[REDACTED]	
Real time clock	[REDACTED]	sec
RAM stamps keyOn	[REDACTED]	sec
RAM Stamps	[REDACTED]	Min
Accelerator Pedal Position	[REDACTED]	%
Engine Coolant Temperature	[REDACTED]	°F
Engine Speed	[REDACTED]	rpm
Vehicle Speed	[REDACTED]	MPH
HV Battery SOC	[REDACTED]	%
Brake Switch Status	[REDACTED]	
Battery Feed Voltage 1 Sense	[REDACTED]	Volts
Battery Feed Voltage 2 Sense	[REDACTED]	Volts
Battery Feed Voltage 3 Sense	[REDACTED]	Volts
Internal EPS Voltage Sense A	[REDACTED]	Volts
Internal EPS Voltage Sense B	[REDACTED]	Volts

Hybrid System State		
Outside Air Temperature		°F
Ignition State		
Propulsion System Active		
HV Contactor Status		
APM Status		
Impact Event		
PRN Position Display		
Distance Travelled with Light ON		
HV Battery State Time	0	Days
eMotor A Shutdown History [0]	0-NO_FAULT	
eMotor A Shutdown History [1]	0-NO_FAULT	
eMotor A Shutdown History [2]	0-NO_FAULT	
eMotor A Fault History [0]	0-NO_FAULT	
eMotor A Fault History [1]	0-NO_FAULT	
eMotor A Fault History [2]	0-NO_FAULT	
eMotor A Fault History [3]	0-NO_FAULT	
eMotor A Fault History [4]	0-NO_FAULT	
eMotor A Fault History [5]	0-NO_FAULT	
eMotor B Shutdown History [0]		
eMotor B Shutdown History [1]		
eMotor B Shutdown History [2]		
eMotor B Fault History [0]		
eMotor B Fault History [1]		
eMotor B Fault History [2]		
eMotor B Fault History [3]		
eMotor B Fault History [4]		
eMotor B Fault History [5]		
eMotor A FA Speed or Position Fault Active		
eMotor A FA Motor Temperature Fault Active		
eMotor A FA inverter Temperature A Fault Active		
eMotor A FA inverter Temperature B Fault Active		
eMotor A FA inverter Temperature C Fault Active		
eMotor A FA DC Current Fault Active		
eMotor A FA DC Voltage Fault Active		
eMotor A FA Acceleration Fault Active		
eMotor A FA Rotor Temperature Fault Active		
eMotor A FA Capacitor Temperature Fault active		
eMotor A FA Current Sensor A Fault Active		
eMotor A FA Current Sensor B Fault Active		
eMotor A FA Current Sensor C Fault Active		
eMotor A FA Postion Sensor Fault Active		

eMotor A FA DC Voltage Out of Range Fault Active

eMotor A FA Reserved

FA Speed or Position Fault Active

FA Motor Temperature Fault Active

FA Inverter Temperature A Fault Active

FA Inverter Temperature B Fault Active

FA Inverter Temperature C Fault Active

FA HV input Current Fault Active

FA HV Input Voltage Fault Active

FA Acceleration Fault Active

FA Rotor Temperature Fault Active

eMotor B FA Capacitor Temperature Fault Active

FA Current Sensor A Fault Active

FA Current Sensor B Fault Active

FA Current Sensor C Fault Active

FA Position Sensor Fault Active

FA DC Voltage Out of Range Fault Active

FA Reserved

eMotor A Current Ia Max

eMotor A Current Ia Min

eMotor A Current Ib Max

eMotor A Current Ib Min

eMotor A Current Ic Max

eMotor A Current Ic Min

eMotor A Current Id Max

eMotor A Current Id Min

eMotor A Current Iq Max

eMotor A Current Iq Min

eMotor A Current Sum Max

eMotor A Current Sum Min

eMotor A HV Input voltage Max

eMotor A HV Input voltage Min

eMotor A speed max mrads

eMotor A speed min mrads

Current Ia Max

Current Ia Min

Current Ib Max

Current Ib Min

Current Ic Max

Current Ic Min

Current Id Max

Current Id Min

Volts

Volts

rad/s

rad/s

(B) (6)

INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552 (B) (6)

eMotor B Current Iq Max		
eMotor B Current Iq Min		
eMotor B current Sum Max		
eMotor B current sum Min		
eMotor B HV Input Voltage Max		Volts
eMotor B HV Input Voltage Min		Volts
eMotor B speed Max mrads		rad/s
eMotor B speed Min mrads		rad/s
eMotor A Current Ia Offset		
eMotor A Current Ib Offset		
eMotor A Current Ic Offset		
eMotor B Current Ia Offset		
eMotor B Current Ib Offset		
eMotor B Current Ic Offset		
eMotor A HV Battery Voltages		Volts
eMotor A HV input Voltages		Volts
eMotor B HV Battery Voltages		Volts
eMotor B HV input Voltages		Volts
eMotor A Motoring Torque Limit		
eMotor A Regenerative Torque Limit		
eMotor B Motoring Torque Limit		
eMotor B Regenerative Torque Limit		
eMotor A Torque command		
eMotor A Torque achieved		
eMotor A speed RPM		rpm
eMotor B Torque command		
eMotor B Torque achieved		
eMotor B Speed RPM		rpm
eMotor A Temperature Stator		°F
eMotor A Temperature Inverter Model		°F
eMotor A Temperature Inverter 0		°F
eMotor A Temperature Inverter 1		°F
eMotor A Temperature Inverter 2		°F
eMotor A Temperature Coolant Inlet		°F
eMotor A Temperature Coolant Outlet		°F
eMotor A Temperature PCB		°F
eMotor A Temperature Rotor		°F
eMotor A OS Runtime Seconds		sec
eMotor B OS Runtime Seconds		sec
eMotor B Temperature Stator		°F
eMotor B Temperature Inverter Model		°F
eMotor B Temperature Inverter 0		°F

eMotor B Temperature Inverter 1	[REDACTED]	
eMotor B Temperature Inverter 2	[REDACTED]	°F
eMotor B Temperature coolant Inlet	[REDACTED]	°F
eMotor B Temperature coolant outlet	[REDACTED]	°F
eMotor B Temperature PCB	[REDACTED]	
eMotor B Temperature Rotor	[REDACTED]	°F
eMotor A Lifetime Over Current w/o Over Voltage Events	0	
eMotor A Lifetime Over Current Events	0	
eMotor A Lifetime Over Voltage Events	0	
eMotor A Lifetime Max Voltage	[REDACTED]	
eMotor A Lifetime Max Phase Current	[REDACTED]	
eMotor A Lifetime General Retry Events	0	
eMotor A Key Cycle Max Voltage	[REDACTED]	
eMotor A Key Cycle Max phase Current	[REDACTED]	
eMotor A Key Cycle General Retry Events	0	
eMotor B Lifetime Over Current w/o Over Voltage Events	0	
eMotor B Lifetime Over Current Events	[REDACTED]	
eMotor B Lifetime Over Voltage Events	0	
eMotor B Lifetime Max Voltage	[REDACTED]	
eMotor B Lifetime Max Phase Current	[REDACTED]	
eMotor B Lifetime General retry Events	0	
eMotor B key Cycle max Voltage	[REDACTED]	
eMotor B key Cycle max Phase Current	[REDACTED]	
eMotor B key Cycle General Retry Events	0	
eMotor A MTMR Fault Word	00 00 00	
eMotor B MTMR Fault Word	00 00 00	
GPS Date - Year	[REDACTED]	Year
GPS Date - Month	[REDACTED]	
GPS Date - Day	[REDACTED]	
UTC Time - Hours	[REDACTED]	
UTC Time - Minutes	0	
UTC Time - [REDACTED]	[REDACTED]	
ECU Time [REDACTED]	[REDACTED]	

ABSO | [REDACTED] | Stored | Implausible Data Received From Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	[REDACTED]	
Test Failed	[REDACTED]	
Test Failed This Operation Cycle	[REDACTED]	
Pending DTC	[REDACTED]	
Confirmed DTC	[REDACTED]	
Test Not Completed Since Last Clear	[REDACTED]	

Test Failed Since Last Clear

Test Not Completed This Operation Cycle

Warning Indicator Requested

Occurrence flag

Controller Event

Mirror Memory

Undervoltage Suspected

Original Odometer Value

Most Recent Odometer Value

Frequency Counter

Ignition Cycle Counter

Fault Time

s

Current System Mode

Previous System Mode

Wheel Speed Left Front

Rotation Direction Left Front

Wheel Speed Right Front

Rotation Direction Right Front

Wheel Speed Left Rear

Rotation Direction Left Rear

Wheel Speed Right Rear

Rotation Direction Right Rear

Steering Wheel Angle

°

Longitudinal Acceleration

m/s²

Yaw Rate

°/s

Supplier Internal Code

SNAPSHOT DATA SUMMARY

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for

No Snapshot Data available for